

## FIG. 1

ggctcgaggccaggatgcctccagtcctgggggaaaatgcttcctcatttgcttctcccagcccacctcaagcagtcctccc 80  
cacccttgagtcctcagcagtggttaaagctgttactttcacagcttcctgggagcgagtgctttctcaagcccgctctgc 160

aaggctctccacttcagcacaATGCTACTGCCTAAAAAATGAAGCTCCTGCTGTTTCTGGTTTCCCAGATGGCCATCTT 240  
M L L P K K M K L L L F L V S Q M A I L

GGCTCTATTCTTCCACATGTACAGCCACAACATCAGCTCCCTGTCTATGAAGGCACAGCCCAGCGCATGCACGTGCTGG 320  
A L F F H M Y S H N I S S L S M K A Q P E R M H V L V

TTCTGTCTTCTGCGCTCTGGCTCTTCTTTTGTGGGCGAGCTTTTGGGCGAGCACCCAGATGTTTTCTACCTGATGGAG 400  
L S S W R S G S S F V G Q L F G Q H P D V F Y L M E

CCCGCTGGCAGGTGTGGATGACCTTCAAGCAGAGCACCGCCTGGATGCTGCACATGGCTGTGCGGGATCTGATACGGGC 480  
P A W H V W M T F K Q S T A W M L H M A V R D L I R A

CGTCTTCTTGTGCGACATGAGCGTCTTTGATGCCTACATGGAACCTGGTCCCCGAGACAGTCCAGCCTCTTTCAGTGGG 560  
V F L C D M S V F D A Y M E P G P R R Q S S L F Q W E

AGAACAGCCGGGCCCCCTGTGTTCTGCACCTGCCTGTGACATCATCCACAAGATGAAATCATCCCCGGGGCTCACTGCAGG 640  
N S R A L C S A P A C D I I P Q D E I I P R A H C R

CTCCTGTGCAGTCAACAGCCCTTTGAGGTGGTGGAGAAGGCCTGCCGCTCCTACAGCCACGTGGTGTCTAAGGAGGTGCG 720  
L L C S Q Q P F E V V E K A C R S Y S H V V L K E V R

CTTCTTCAACCTGCAGTCCCTCTACCCGCTGCTGAAAGACCCCTCCCTCAACCTGCATATCGTGCACCTGGTCCGGGACC 800  
F F N L Q S L Y P L L K D P S L N L H I V H L V R D P

CCCGGGCCGTGTTCCGTTCCCGAGAACGCACAAAGGGAGATCTCATGATTGACAGTCGCATTGTGATGGGGCAGCATGAG 880  
R A V F R S R E R T K G D L M I D S R I V M G Q H E

CAGAACTCAAGAAGGAGGACCAACCCTACTATGTGATGCAGGTCATCTGCCAAAGCCAGCTGGAGATCTACAAGACCAT 960  
Q K L K K E D Q P Y Y V M Q V I C Q S Q L E I Y K T I

CCAGTCCTTGCCCAAGGCCCTGCAGGAACGCTACCTGCTTGTGCGCTATGAGGACCTGGCTCGAGCCCCCTGTGGCCCA 1040  
Q S L P K A L Q E R Y L L V R Y E D L A R A P V A Q T

CTTCCCGAATGTATGAATTCGTGGGATTGGAATCTTGCCCCATCTTCAGACCTGGGTGCATAACATCACCCGAGGCAAG 1120  
S R M Y E F V G L E F L P H L Q T W V H N I T R G K

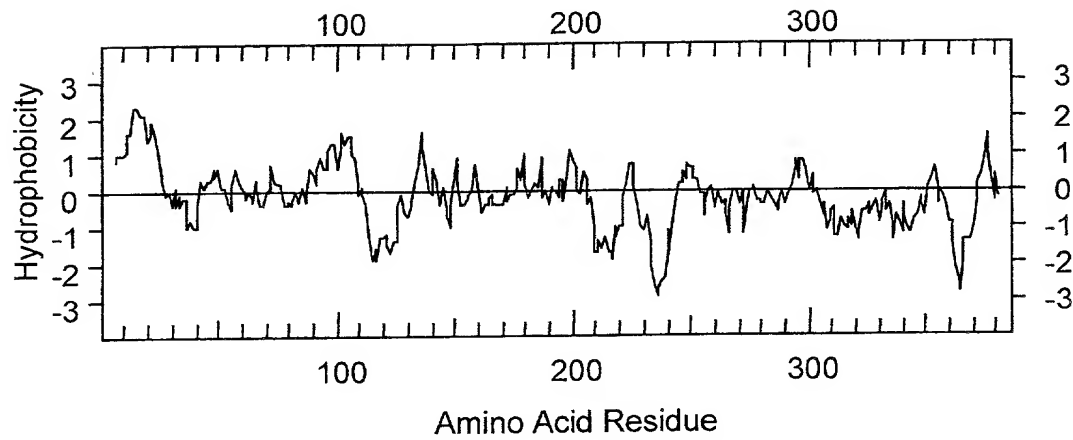
GGCATGGGTGACCACGCTTTCCACACAAATGCCAGGGATGCCCTTAATGTCTCCAGGCTTGGCGCTGGTCTTTGCCCTA 1200  
G M G D H A F H T N A R D A L N V S Q A W R W S L P Y

TGAAAAGGTTTCTCGACTTCAGAAAGCCTGTGGCGATGCCATGAATTTGCTGGGCTACCGCCACGTGAGATCTGAACAAG 1280  
E K V S R L Q K A C G D A M N L L G Y R H V R S E Q E

AACAGAGAAACCTGTTGCTGGATCTTCTGTCTACCTGGACTGTCCCTGAGCAAATCCACTAAGaggggttgagaaggcttt 1360  
Q R N L L L D L L S T W T V P E Q I H \*

gctgccacctgggtgtcagcctcagtcactttctctgaatgcttctgagccttgccatctctgagccttaactacatg 1440  
tctgtgggtatcacactgagtgagtggtgtgtccacacgtgctcaagcagaaggactttgtgtccatgcttgtgtctag 1520  
aaaacagactggggaaccttatgtgagcagcacatcccaccagtgaacagggtattgctcttcttcttcttctgtatctt 1600  
cctgtctgggcagacttcagagactttgtggcctggaggcctattaagcacgacacagtatcagtggaattgatccataa 1680  
acctccctgtccacatcttgcccaatggggaatggatctttcaccaaaagagctcaccagcattttccacagagatgcaaa 1760  
ttctgagcccttgaggttccagtggttcaaggaaggaagtgggaacaaggttgatgcctacttatgagcttgaccat 1840  
cacagctatcggtaatcagaaatatgaaacaaaatctctgcacaaaagagcaagctcttaagttcacagggtgcctgggc 1920  
tgcatttgaatatcacttccccctctgcattttcccatcacatagaagactttgacctgtgaagctgccatctgttaatac 2000  
taaaattcccaataaagaaaaaaaaaaaaaaaaa 2032

FIG. 2



4000796-10004  
T0001-29220004

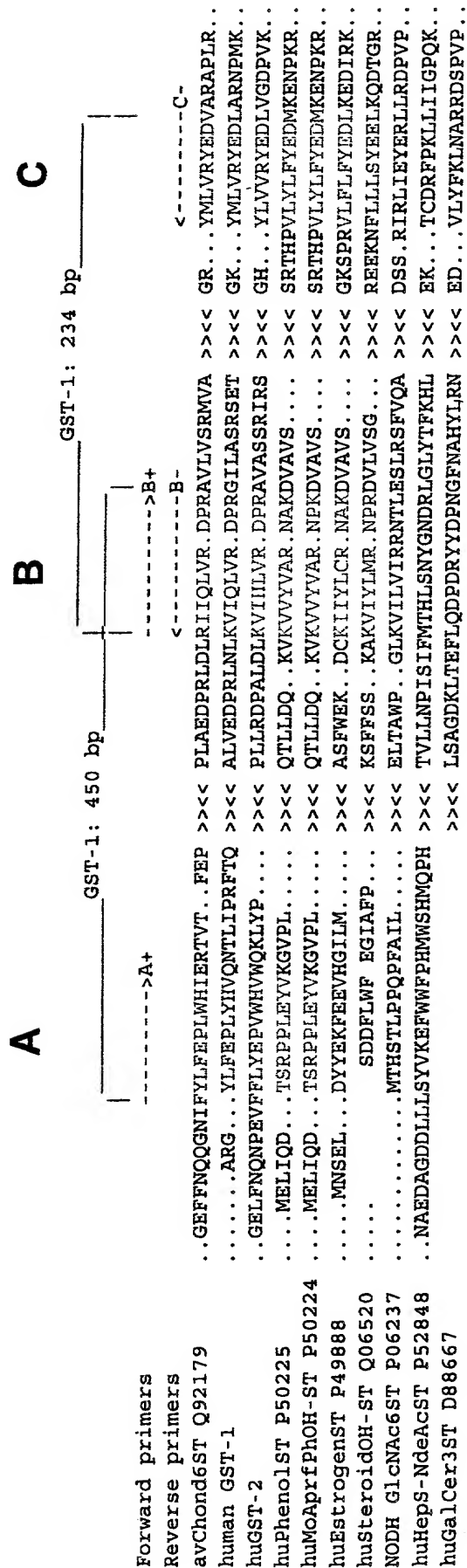
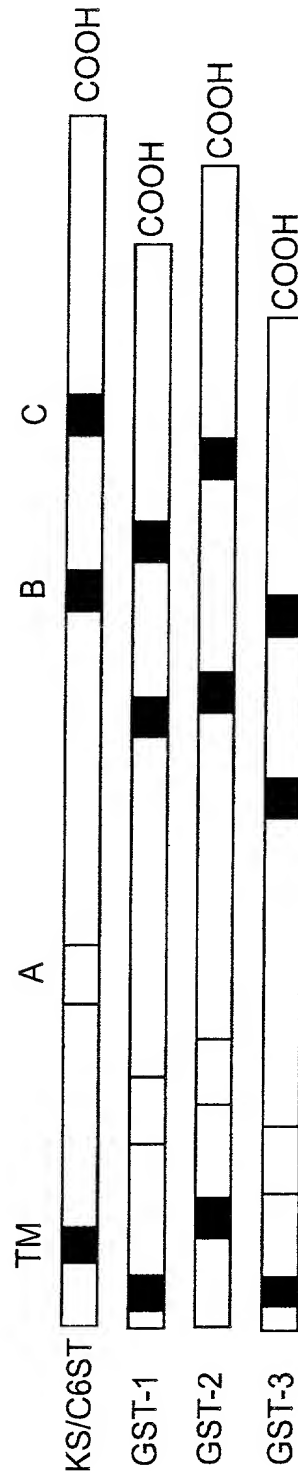


FIG. 3

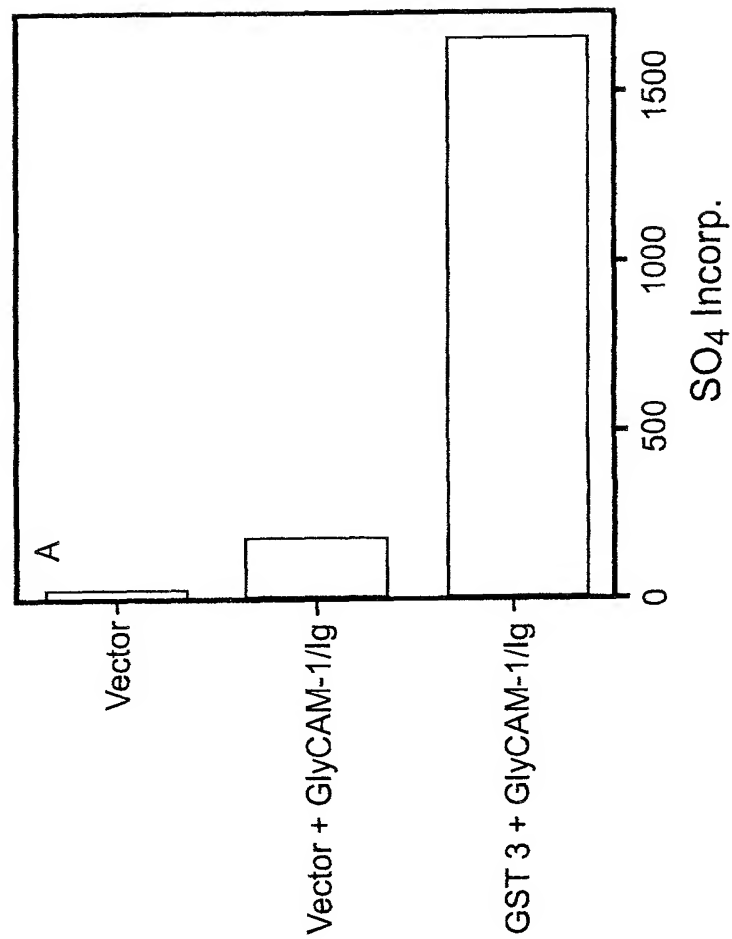
FIG. 4

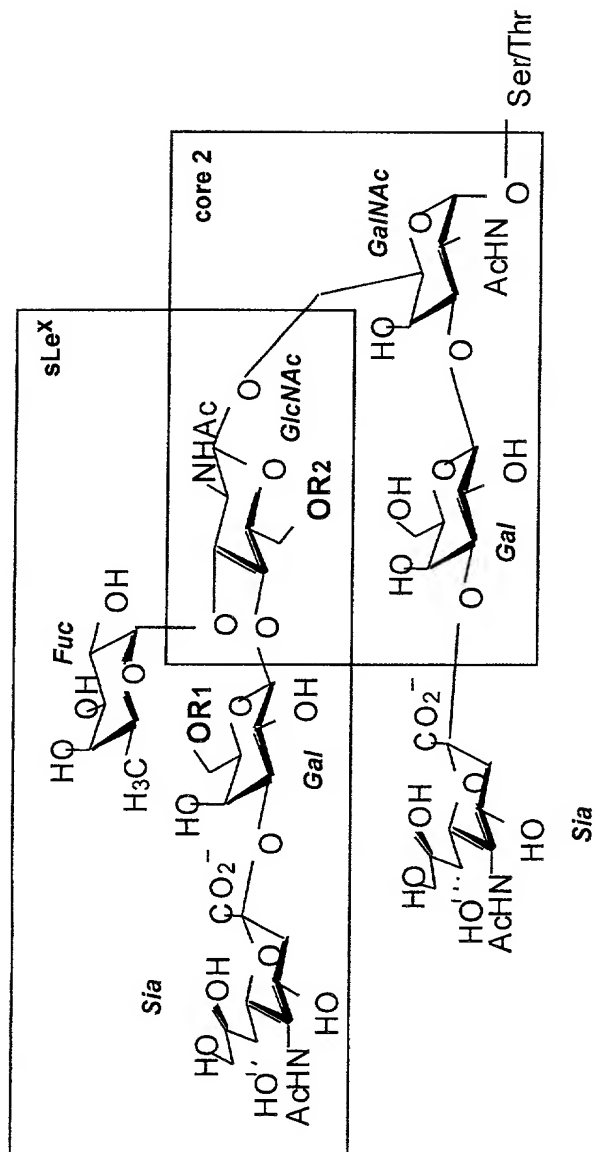


HEC-GlcNAc6ST	106	SWRSGSSFVGLFGQHPDVFYLMEPAMHV	134
GlcNAc6ST		TWRSGSSEFGELEFNQNPVEFELYEPVWHV	
KSGal6ST		TTRSGSSFVGLFENQHLDVFYLFEPYHV	
C6ST		TTRTGSSEFVGEFFENQGNIFYLFEPLWHI	
HEC-GlcNAc6ST	249	DPSNLHIVHLVRDPRAVFRSR	270
GlcNAc6ST		DPALDLKVIHLVRDPRAVAS SR	
KSGal6ST		DPRNLKVLQLVRDPRGIIASR	
C6ST		DPRDLRVIQLVRDPRAVIA SR	
HEC-GlcNAc6ST	320	PKALQERYLLVRYEDLARAP	339
GlcNAc6ST		PDWLQCHYLVRYEDLVGDP	
KSGal6ST		PPWLKGYMLVRYEDLARNP	
C6ST		PAWLGRYMLVRYEDVARGP	

FIG. 5

FIG. 6





R1 = H, R2 = SO<sub>3</sub><sup>-</sup> : 6-sulfo sLex  
 R1 = SO<sub>3</sub><sup>-</sup>, R2 = H : 6'-sulfo sLex  
 R1 = R2 = SO<sub>3</sub><sup>-</sup> : 6',6-disulfo sLex

FIG. 7

FIG. 8

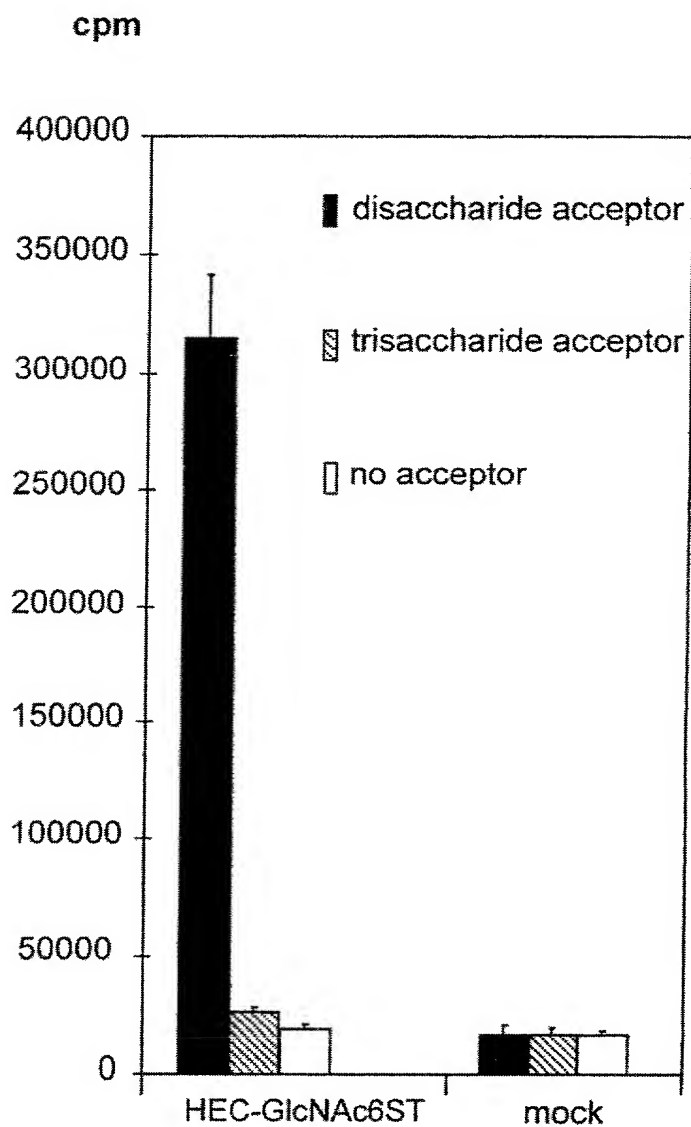




FIG. 9

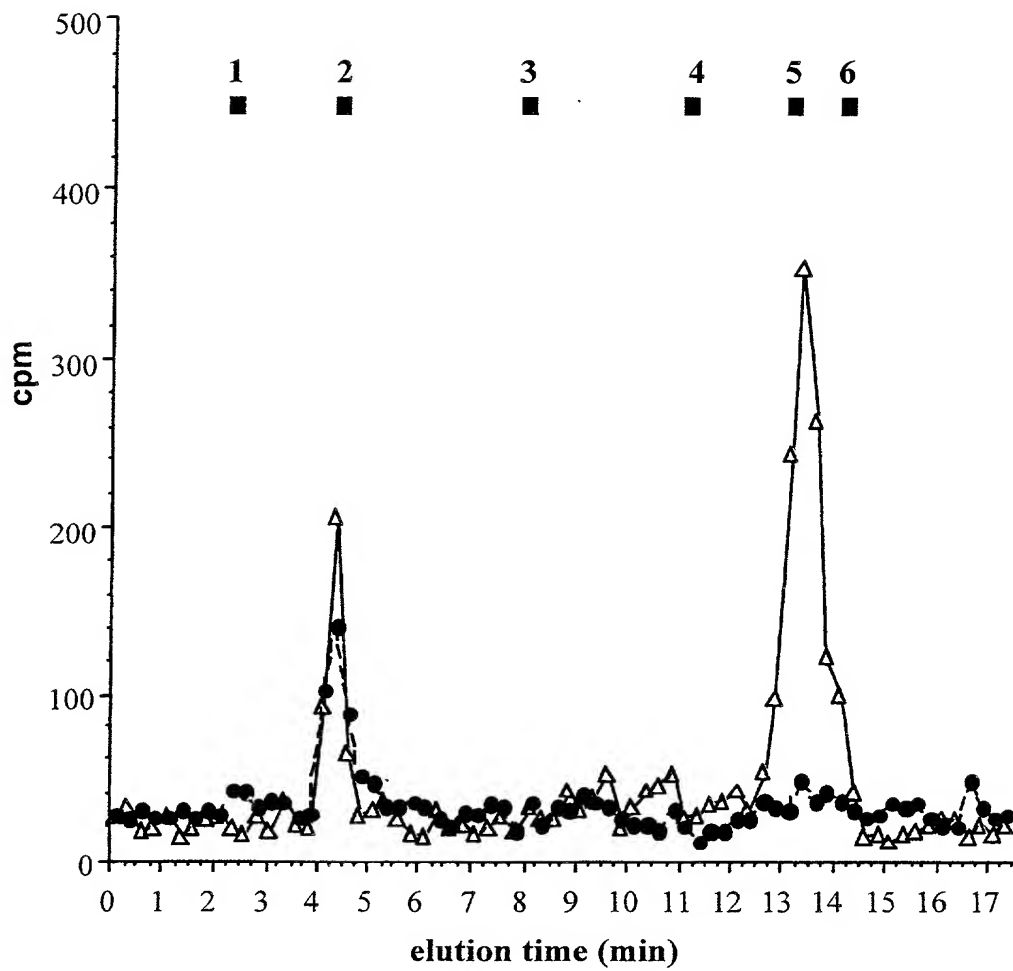


FIG. 10

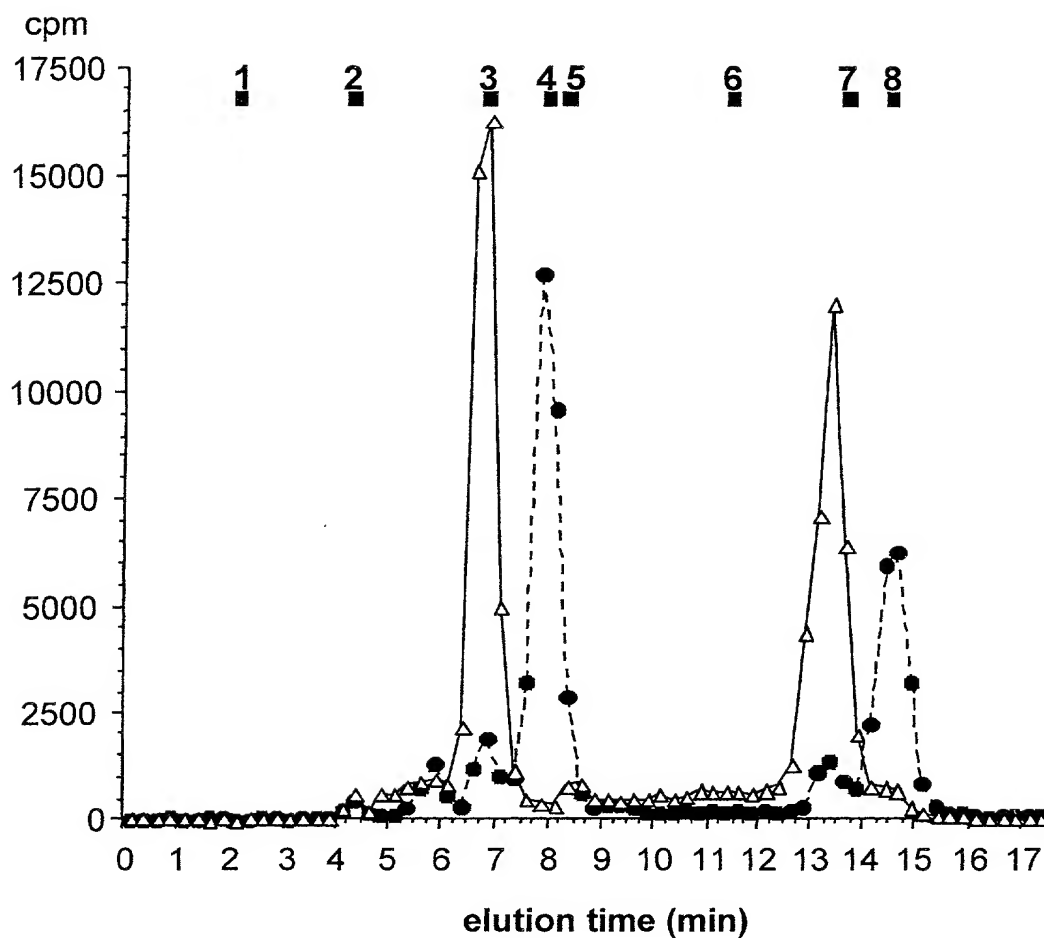


FIG. 11B

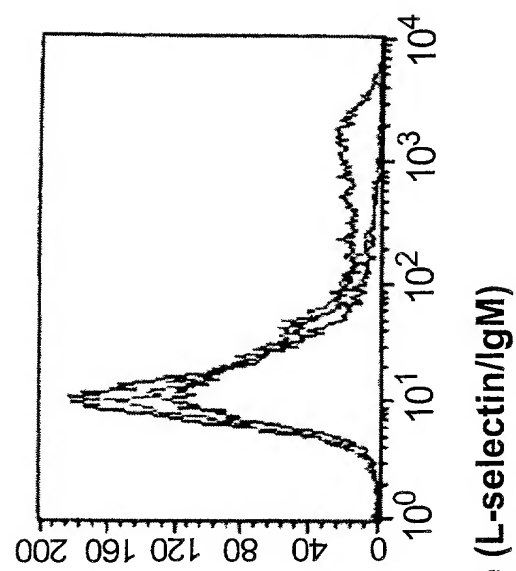


FIG. 11A

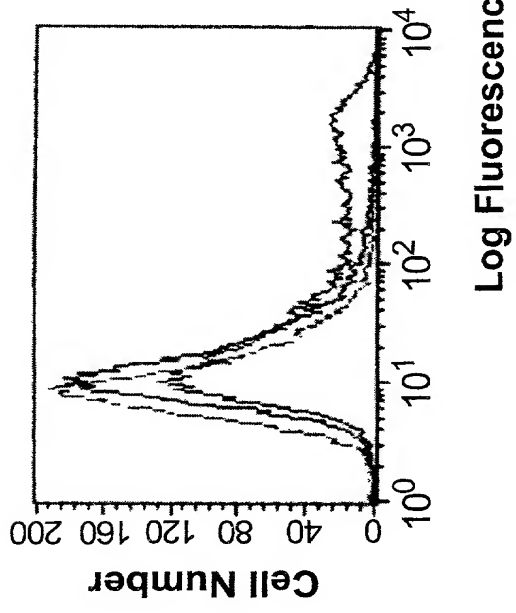
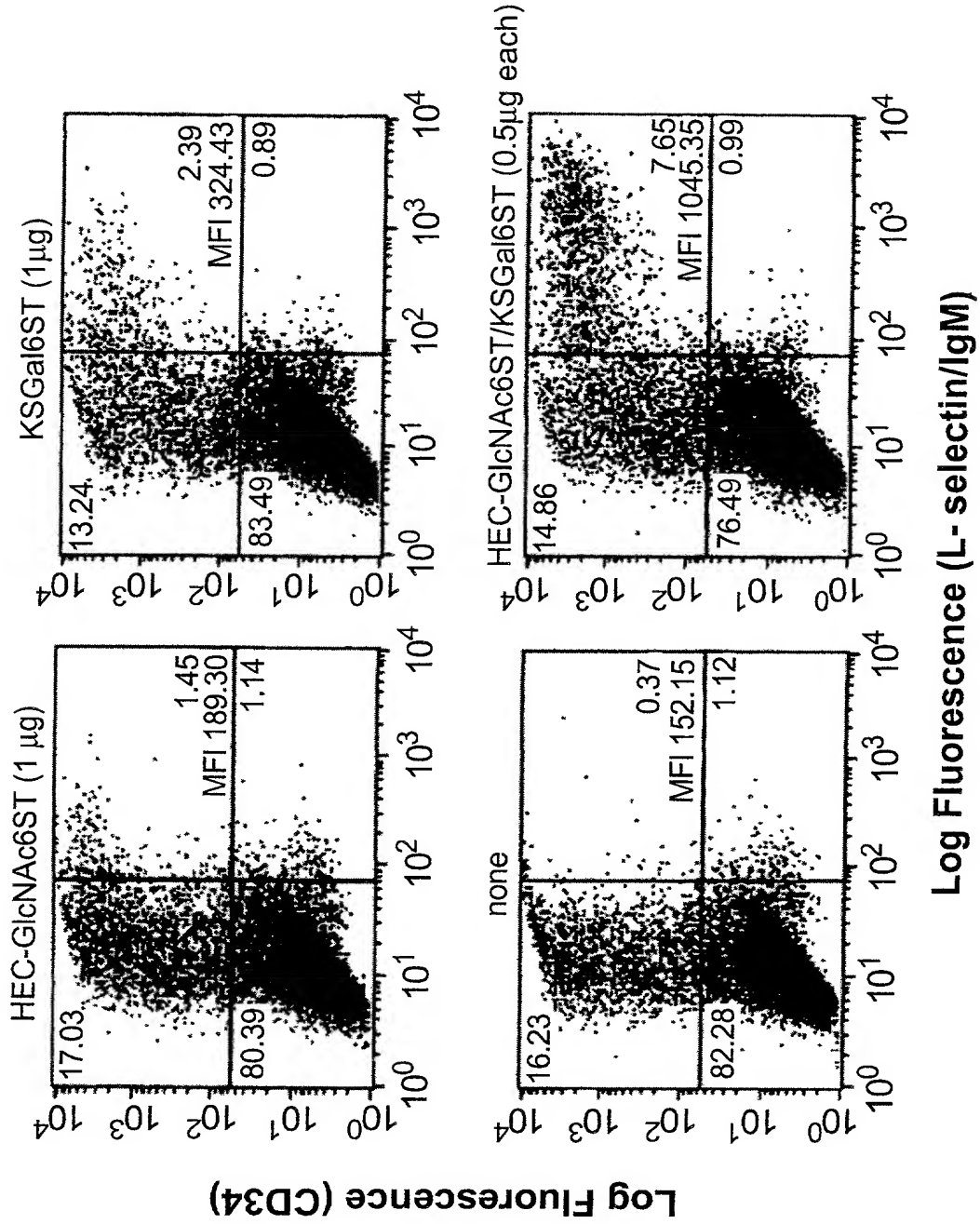


FIG. 11C



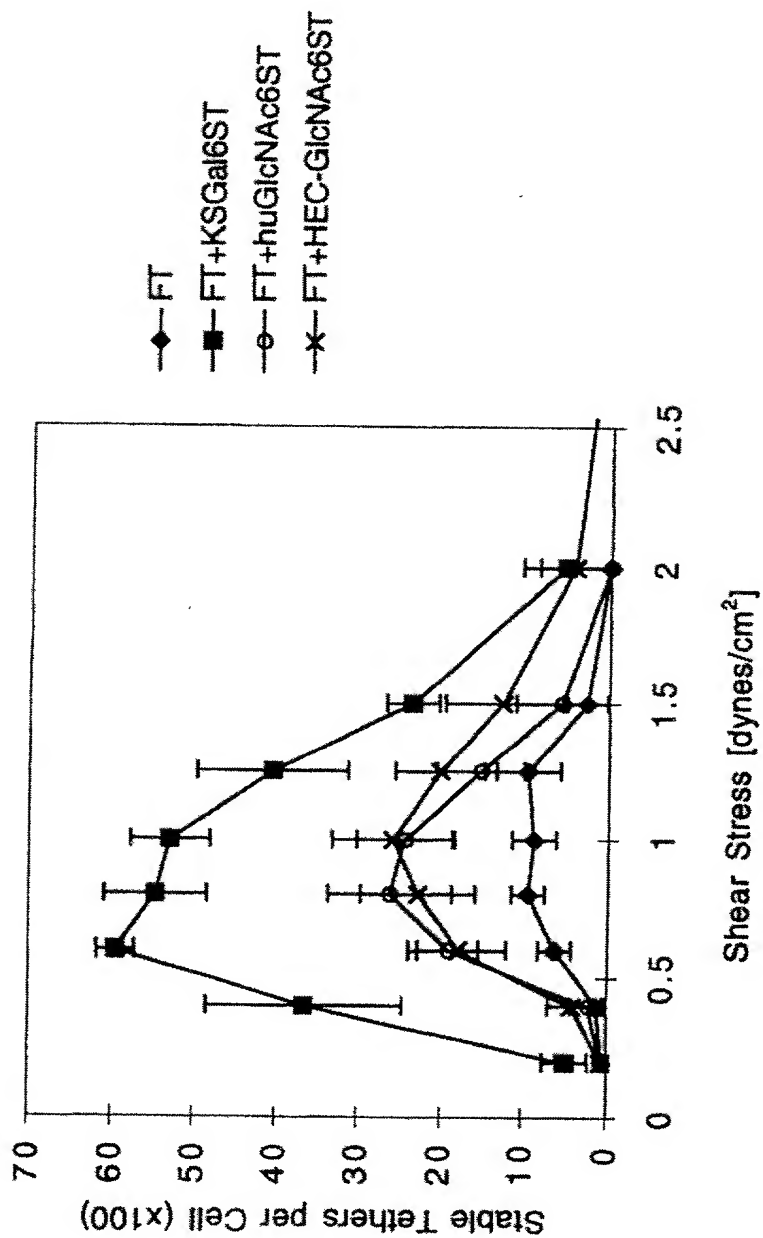


FIG. 12

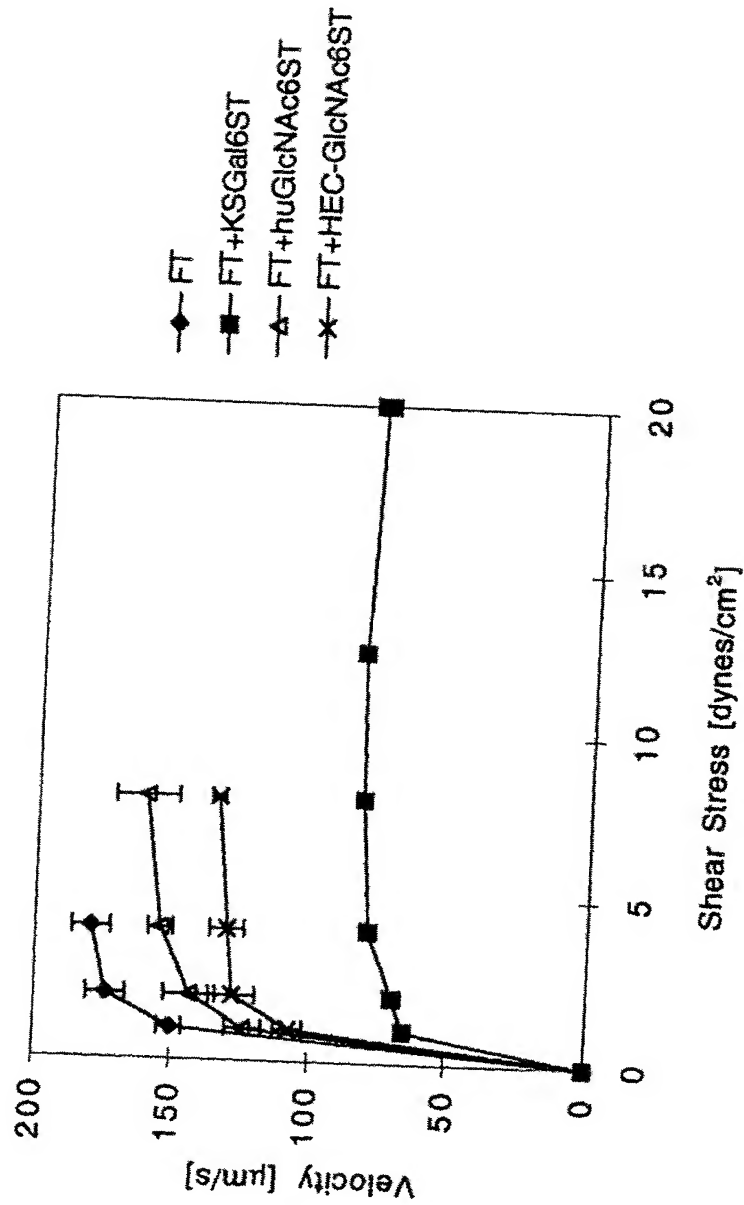


FIG. 13

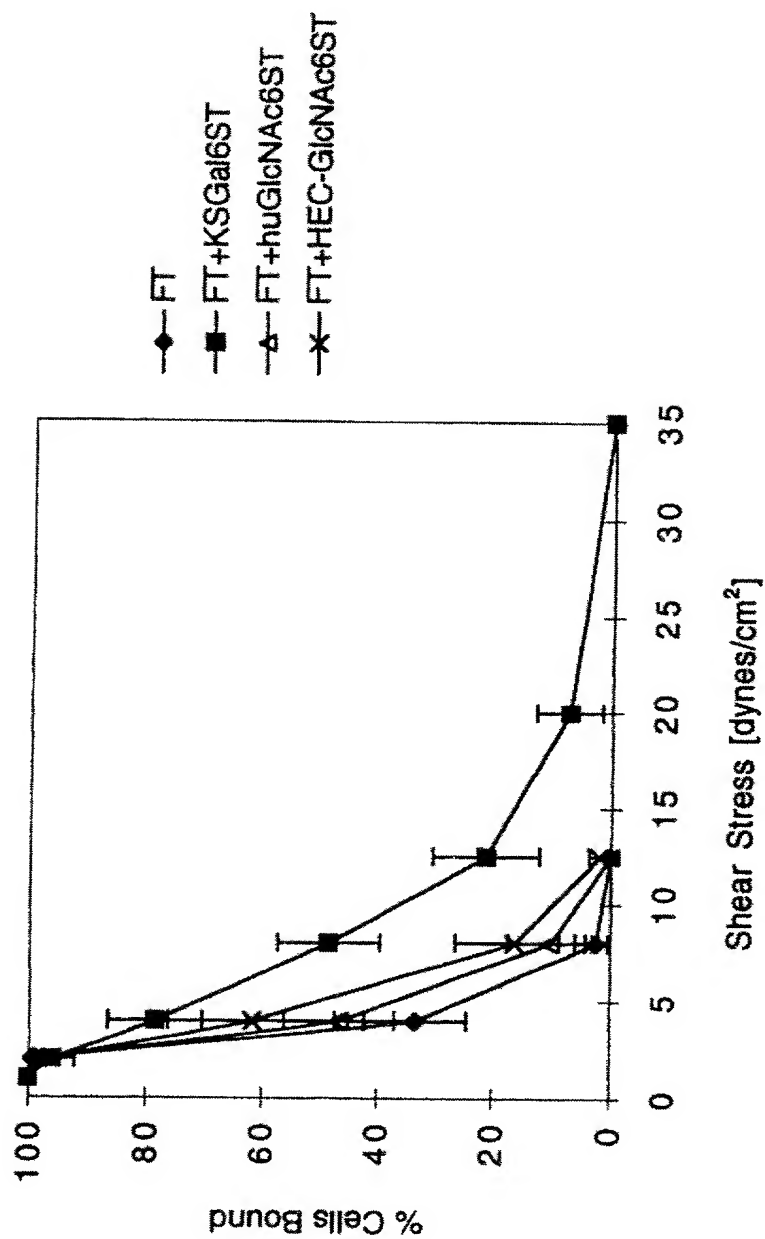


FIG. 14